



California Energy Commission
Research & Development

Webinar on Emerging Technologies: Phase Change Materials

August 16, 2017 | 10am-11am PDT

Co-sponsored by:



Members include: Pacific Gas & Electric Company, Southern California Edison, San Diego Gas & Electric, Southern California Gas Company, Sacramento Municipal Utility District, Los Angeles Department of Water & Power, and the California Energy Commission, with oversight by the California Public Utilities Commission.



Agenda

| Topic | Time |
|--|-------|
| Background | 10:00 |
| Phase Change Material in New Construction Training Center <ul style="list-style-type: none">• Martin Vu, RMS Energy Consulting, LLC• Kyle Dunn, MWE2, LLC | 10:05 |
| Q&A | 10:20 |
| Microencapsulated Phase Change Materials for Energy Efficient Buildings <ul style="list-style-type: none">• Laurent Pilon, UCLA | 10:30 |
| Q&A | 10:45 |
| Closing | 10:55 |



Background

▶ Purpose

- ▶ ETCC – learn more in the bonus session immediately following this webinar

▶ Format

- ▶ Please type your questions into the Q&A section in WebEx at any time.

A screenshot of the WebEx Q&A interface. The window has a title bar with a dropdown arrow and the text "Q&A", and a close button (X) in the top right corner. Below the title bar, the text "All (0)" is displayed in blue. A horizontal line separates this from the input area. The input area contains a label "Ask:" followed by a dropdown menu currently showing "All Panelists". Below the dropdown is a text input field with the placeholder text "Select a panelist in the Ask menu first and then type your question". To the right of the input field is a grey "Send" button. In the bottom right corner, there is a red microphone icon and the text "Connected" next to a blue dot.



Phase Change Material in New Construction Training Center

Martin Vu

RMS Energy Consulting

Kyle Dunn, P.E.

Mechanical, Water, and Energy Efficiency (MWE2)

Questions





Microencapsulated Phase Change Materials for Energy Efficient Buildings

Laurent Pilon

University of California, Los Angeles

Questions





Closing

- ▶ Presentations and recording of this webinar will be posted:
www.energy.ca.gov/research/notices

- ▶ Information on our programs:
 - ▶ Emerging Technologies Coordinating Council
www.etcc-ca.com
 - ▶ Energy Commission Research and Development
www.energy.ca.gov/research



Closing

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Bonus Session on EPIC and the Emerging Technologies Program

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Agenda

| Topic |
|---|
| SDG&E ETP Overview <ul style="list-style-type: none">Kate Zeng, Sempra Energy Utilities |
| CEC EPIC Overview <ul style="list-style-type: none">Mark Kootstra, California Energy Commission |
| Q&A |



SDG&E ETP Overview



Major Energy Commission Research Programs

Electric Program Investment Charge

- ▶ Approximately \$120 M/year

Natural Gas RD&D

- ▶ Approximately \$21 M/year



Energy Innovation Pipeline

APPLIED RESEARCH AND DEVELOPMENT

Focuses on validating new
ideas and technologies

TECHNOLOGY DEMONSTRATION AND DEPLOYMENT

Demonstrates strategies
at real-world scales

MARKET FACILITATION

Overcomes non-technical
hurdles to increase
market adoption and
expansion of
emerging solutions

emerging solutions
expansion of
market adoption and



Useful Links

Investment Plans

- ▶ http://www.energy.ca.gov/research/annual_reports.html

Solicitation Information

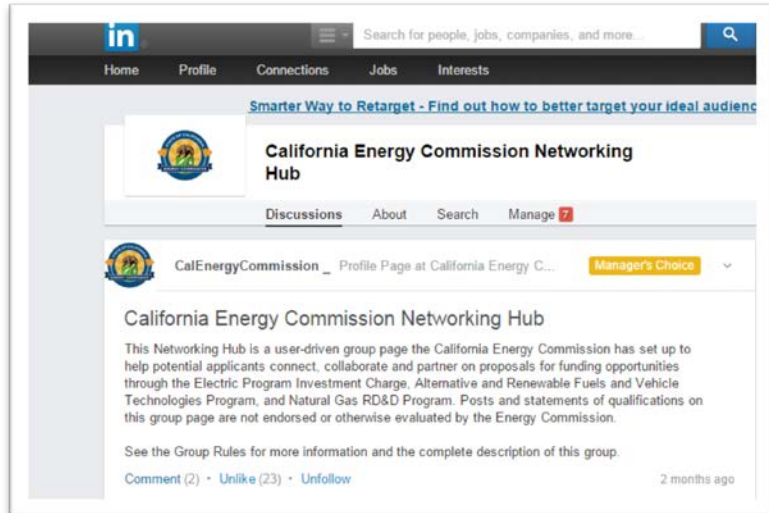
- ▶ EPIC: <http://www.energy.ca.gov/contracts/epic.html>
- ▶ Natural Gas: <http://www.energy.ca.gov/contracts/pier.html>

Innovation Showcase

- ▶ <http://innovation.energy.ca.gov/>



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Questions

